

## THE CHINESE SPECIES OF THE GENUS PLATYDEMA LAPORTE ET BRULLÉ (COLEOPTERA, TENEBRIONIDAE) WITH DESCRIPTION OF A NEW SPECIES

HUANG Wen-Jing , REN Guo-Dong

College of Life Sciences , Hebei University , Baoding 071002 , China

**Abstract** A new species of *Platydema* Laporte et Brullé *P. brunnea* sp. nov. , is described , and a key to the known Chinese species of the genus is provided. Type specimens of the new species are deposited in the Hebei University Museum , Baoding , China (HBUM) .

**Key words** Coleoptera , Tenebrionidae , *Platydema* , new species , China.

The genus *Platydema* Laporte et Brullé , 1831 , is a species-rich taxon of ca. 290 species known up to now. Its type species is *P. dejeanii* Castelnau et Brullé , 1831 and belongs currently to the tribe Diaperini (Coleoptera , Tenebrionidae) . It is mostly distributed in Asia , Australia , Africa and America. There are 25 species (including the new one described below) occurring in China and they were mainly described by the following authors: Walker (1858) , Motschulsky (1873) , Lewis (1894) , Gravely (1915) , Gebien (1913 , 1925 , 1928) , Blair (1930) , Nakane (1973) , Masumoto (1982 , 1984) and Schawaller (2003 , 2004) . In this paper , we describe one new species from China , provide a key to the known Chinese species. The type specimens in this study are deposited in the Hebei University Museum , Baoding , China (HBUM) .

### *Platydema* Laporte et Brullé , 1831

*Platydema* Laporte et Brullé , 1831. Ann. Sci. Nat. , 23 (91) : 350 (Type species : *P. dejeanii* Castelnau et Brullé , 1831) .

*Typhobia* Pascoe , 1869. Ann. Mag. , 3 (4) : 281 (Type species : *T. fuliginea* Pascoe , 1869) .

*Asisochara* Gebien , 1925. Phil. Jour. Sci. , 28: 101 (Type species : *A. gynadromorpha* Gebien , 1925) .

*Histeropsis* Chevrolat , 1878. Pet. Nouv. , 2: 209 (Type species : *P. americanum* Laporte et Brullé , 1831) .

**Diagnosis.** Oval or long oval , dorsum bulge or flat. Head semicircular , horned in some males ; labrum membrane wide on base ; terminal segment of maxillary palp narrow axe-shaped. Antennae a little exceeded base of Pronotum , and gradually dilated to apex ; 1<sup>st</sup> segment short and thick ; 2<sup>nd</sup> segment very short , subround ; 3<sup>rd</sup> segment longer than the other segments , nearly cone-shaped ; 4<sup>th</sup> to 11<sup>th</sup> segments wide , mostly amplexicaul-form ; terminal segment oval. Pronotum transversely wide ; anterior margin prominent ; lateral margins round ; posterior margin wide , foliiform enlarged afterward medially ; edging whole. Scutellum very small , triangular

or subround. Elytra oval , slight protuberant or flat ; lateral margin with edging ; puncture line or groove regular.

The living habit of this genus is similar to *Diaperis* , and they are usually found in the broad-leaved trees and polypores.

**Key to the Chinese species of *Platydema* Laporte et Brullé**

1. Elytra multicoloured , often with different fleck or stripe , or both ... 2  
Elytra black or brown , without fleck or stripe ..... 6
2. Head without horns or tubercles ..... 3  
Head with horns or tubercles in male ..... 4
3. Genae as width as transverse diameter of eye ; 6 apical segments of antenna swollen ; elytra feebly metal shinning , with serrated black stripe. Body length 4.6-5.0 mm ..... *P. flavopictum* Gebien , 1913  
Genae width much narrower than transverse diameter of eye ; 8 apical segments of antenna swollen ; elytra bright , with black stripe , converging to suture. Body length 2.7-3.0 mm .....  
..... *P. pallidicollis* (Lewis) , 1894
4. Frons with 1 flat cone-shaped horn in male ; elytra dark brown , with 4 yellowish brown , zigzag fleck. Body length 3.5-4.5 mm .....  
..... *P. aurimaculatum* Gravely , 1915  
Frons with 2 horns in male ..... 5
5. Horns of frons in male symmetry , slender and parallel , base cupped ; elytra black , with red , longitudinal stripe in base and suture. Body length 4.0-5.0 mm ..... *P. indicum* Gebien , 1940  
Horns of frons in male sturdy , the right one longer than the left one ; both gender with tubercles between eyes ; elytra with special stripes. Body length 4.5 mm ..... *P. haemorrhoidale* Gebien , 1913
6. Dorsum with strongly blue or red shinning , not dark black , occasional black or brown shinning ..... 7  
Elytra or dorsum only black , dim and matte ..... 21
7. Head simple , without horns or tubercles ..... 8  
Head with horns or tubercles in male ..... 13
8. Punctato-striate of elytra indistinct , punctures in striate shallow ..... 9  
Punctato-striate of elytra distinct , internal weakly convex ; body oval , feebly convex ; dorsum vermillion , with finely silky shinning .....  
..... *P. sauteri* Gebien , 1913
9. Antenna with 8 swollen apical segments ..... 11  
Antenna with 6 swollen apical segments ..... 10
10. Dorsum dark green , with strongly metal shinning ; frons with wide groove on middle. Body length 5.3-6.0 mm .....  
..... *P. parachalceum* Masumoto , 1982  
Dorsum brown-black , with green metal shinning ; frons without wide

The project was supported by the National Science Foundation of China (30570209; 30130040) , and the Key Laboratory of Invertebrate Systematics and Application of Hebei Prov. (ISA200902) .

Received 20 Jan. 2009 , accepted 27 May 2009.

groove on middle. Body length 6.5-7.0 mm ..... P. semimetallicum Blair, 1930

11. Distant between eyes clearly less than eye width, about 0.64 times; dorsum only black, with strongly metal shinning. Body length 6.0 mm ..... P. coeruleum Gebien, 1928  
Distant between eyes wider than eye width or equal ..... 12

12. Distant between eyes wider than eye width, about 1.37 times; dorsum single reddish brown, with weakly shinning. Body length 5.5-6.0 mm ..... P. chalceum Gebien, 1925  
Distant between eyes equal to eye width; dorsum single dark brown, with strongly metal shinning. Body length 7.5-9.0 mm ..... P. yunnanicum Schawaller, 2004

13. 2 horns of frons in male asymmetry, protended afterward, clypeus with odontoid protuberance ..... 14  
2 horns of frons in male symmetry, clypeus without odontoid protuberance ..... 15

14. The left horn longer than the right one; left horn thick flack-form, sides subparallel, apex with hairs; right horn short triangle, no hairs ..... P. alticornis Gravely, 1915  
The left horn tubercle-form, and the right one base wide, apex long and narrow, without hairs at apex ..... Platydema brunnea sp. nov.

15. Male with 2 sharp and short horns of frons ..... 16  
Male with 2 slender and long horns of frons ..... 18

16. Male with 2 parallel horns of frons ..... 17  
Male with 2 not parallel horns of frons, but spreaded out outside; dorsum black, with strongly blue-green metal shinning. Body length 4.5-5.0 mm ..... P. marseuli Lewis, 1894

17. Body larger than 4.5 mm, strongly convex, dim and green shinning; dorsal punctures lack, intervals striate of elytra slightly convex, with metal shinning ..... P. yangmingense Masumoto, 1982  
Body smaller than 4.5 mm (between 4.1-4.3 mm), weakly strongly convex, dark reddish brown; intervals striate of elytra flat and matte ..... P. endoi Masumoto, 1984

18. 2 horns of frons in male subparallel, protended to anterior and upper; frons deeply cupped. Body length 4.5 mm ..... P. tuchinlongi Masumoto, 1982  
2 horns of frons in male horizontally protended ..... 19

19. Frons flatt between horns; pronotum wide; Aedeagus parameres sharp triangle. Body length 6.0 mm ... P. guangxicum Schawaller, 2004  
Frons cupped between horns ..... 20

20. Frons bright, no punctures, deeply cupped between horns; dorsum brown yellow, with shinning, anterior part with weakly purple shinning. Body length 5.5-6.5 mm ..... P. higonium Lewis, 1894  
Frons Y-shaped cupped between horns; body large, wideded clearly to anterior; eyes round in lateral view. Body length 6.5-7.8 mm ..... P. terusane Masumoto, 1984

21. Head without horns in male ..... 22  
Head with horns in male ..... 24

22. Male meso- and metatibiae clearly curving in middle, gradually widened to apex. ..... 23  
Male meso- and metatibiae unclearly curving in middle ..... P. fumosum Lewis, 1894

23. Dorsum single black; distant between eyes 1.5 times wider than eye diameter; body large ..... P. detersum Walker, 1858  
Dorsum chestnut brown; distant between eyes almost equal to eye diameter. Body length 7.0-9.0 mm ..... P. sakishimense Nakane, 1973

24. Distant between eyes equal to eye diameter in male; head with 2 asymmetry, separate and upright horns, right one thicker than left one; body small ..... P. subfascium (Walker, 1858)  
Distant between eyes 2 times wider than eye diameter in male; head with 2 upright horns, without hairs; clypeus transversely elliptical, front margin angle-form prominent ..... P. tricuspis Motschulsky, 1873

The species from China

### 1) Platydema alticornis Gravely, 1915 (Fig. 8)

*Platydema alticornis* Gravely, 1915. Rec. Ind. Mus., 8: 525.  
*Anisocara gynandromorpha* Gebien, 1925. Philipp. J. Sci., 28: 101;

Schawaller, 2004. Stuttgarter Beitr. Naturk., (A) Nr. 671: 5-6.

Material examined. 2 ♂, 3 ♀, Mohan, Mengla County, Yunnan, 3-4 Aug. 2007, collected by REN Guo-Dong, HOU Wen-Jun and LI Ya-Lin.

Distribution. China (Yunnan, Taiwan), Nepal, Laos, Thailand, Burma (type locality Tenesserim), Vietnam, Philippines, Indonesia, Java, Luzon.

### 2) Platydema aurimaculatum Gravely, 1915 (Fig. 9)

*Platydema aurimaculatum* Gravely, 1915. Rec. Ind. Mus., 8: 523.

*Platydema cederholmi* Kaszab, 1980. Acta Zool. Hung., 26 (1-3): 161; Schawaller, 2004. Stuttgarter Beitr. Naturk., (A) Nr. 671: 6.

*Platydema monoceratoides* Masumoto, 1982. Entomological Rev. Japan, 36 (2): 144; Schawaller, 2004. Stuttgarter Beitr. Naturk., (A) Nr. 671: 6.

Material examined. 5 ♂, 1 ♀, Limu Mountain, Hainan, 22 July 2006, collected by WANG Ji-Liang and GAO Chao; 1 ♂, 3 ♀, Xinwei Farm, Qiongzhong County, Hainan, 4700 m, 17-18 May 2008, collected by BA Yi-Bin and LANG Jun-Tong; ♂, Wangtianshu, Mengla County, Yunnan, 6-7 Aug. 2007, collected by REN Guo-Dong, HOU Wen-Jun and LI Ya-Lin.

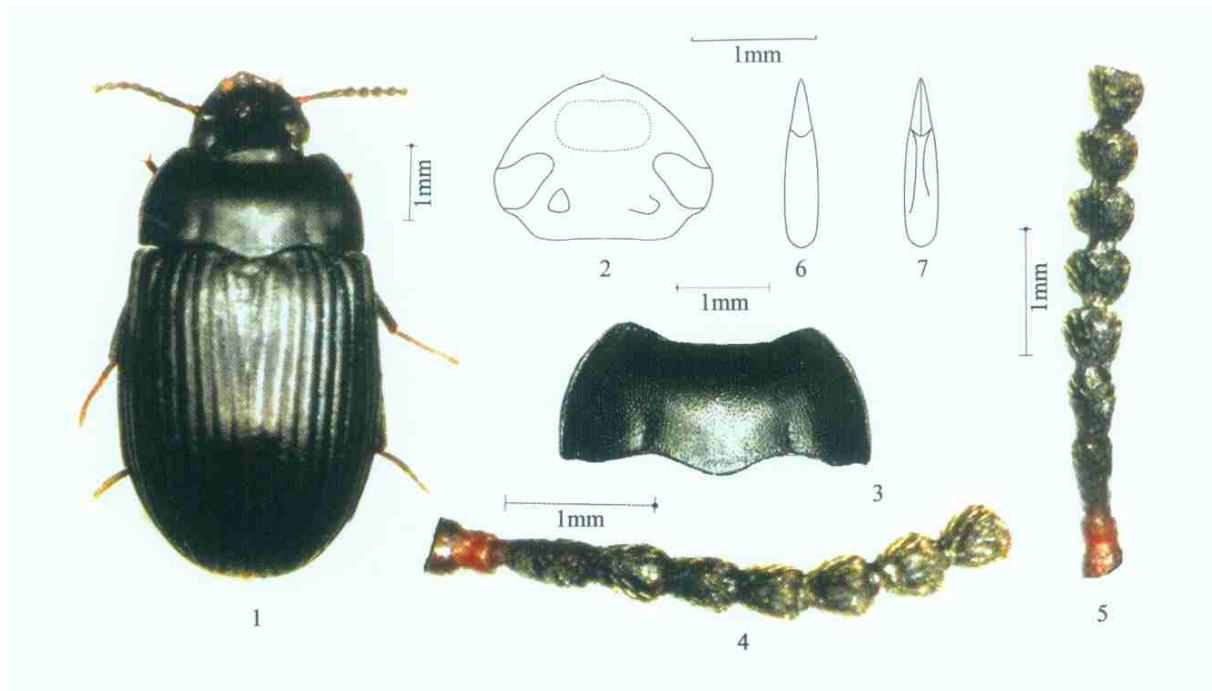
Distribution. China (Hainan, Yunnan, Taiwan), India (type locality), Sri Lanka, Burma, Thailand, Laos.

### 3) Platydema brunnea sp. nov. (Figs. 1-7)

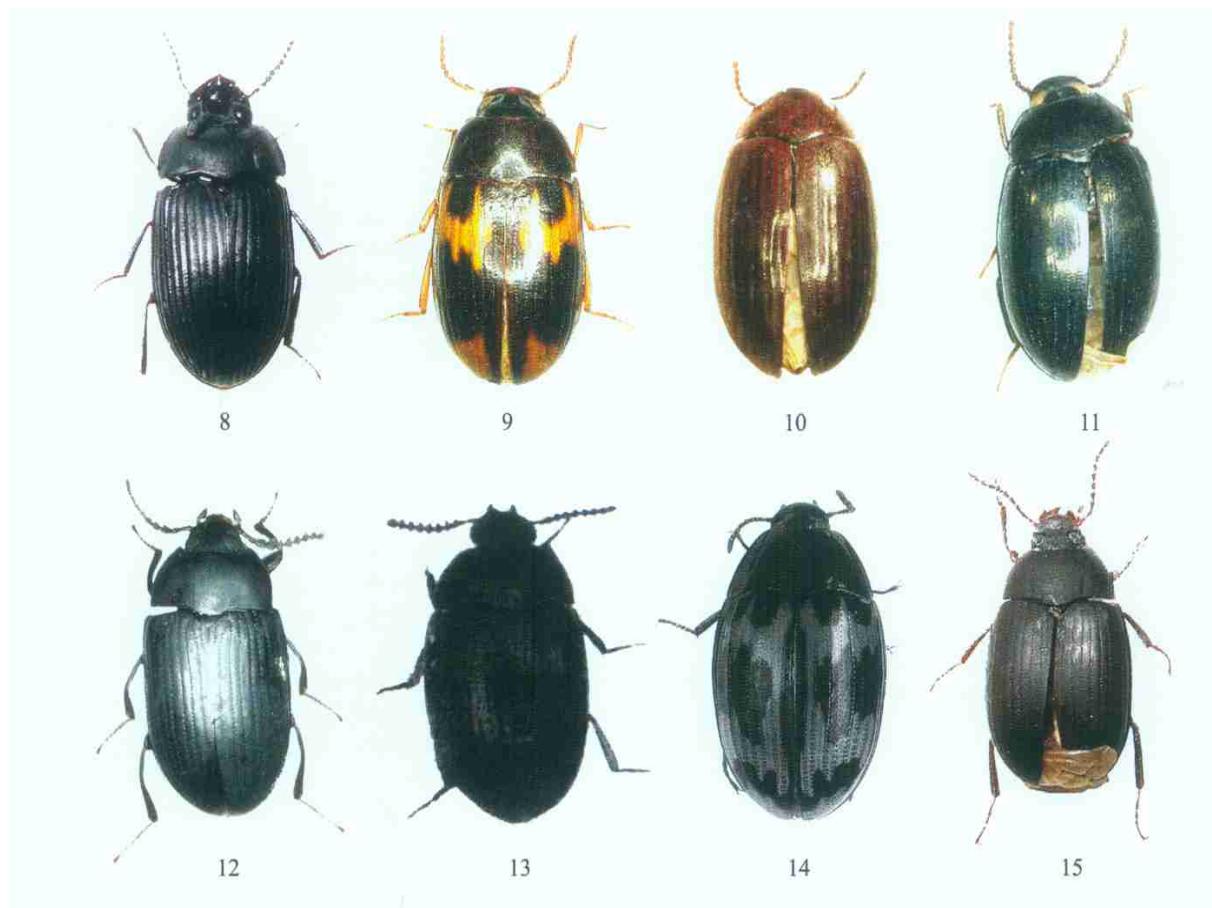
Brown black, feebly metal shinning. Mouthpart, ventral surface and legs dark brown, tarsi reddish brown. Body oblong-oval, strongly convex above.

Male. Head triangular, densely punctate. Clypeus feebly convex, anterior margin angle-form prominent; anterior genae convex, sides slightly arcuate, posterior genae inlaid into compound eyes; eyes large. Frons with 2 asymmetrical horns, left horn strumae; right horn produced afterward, base wide, apex narrow and long, no hairs. Anterior margin of clypeus and lateral margin of genae strongly curved upward. Antennae (holotype lack of the last 2 segments) loose stick, slightly exceeded base of Pronotum, beginning to swell from 4<sup>th</sup> segment, relative length of each segment from 2<sup>nd</sup> to 9<sup>th</sup> 2.0 4.0 3.5 2.9 3.0 2.8 2.6 2.5 2.9 4.0.

Pronotum transversely wide, about 3.0 times as broad as long; anterior margin strongly arcuate, wide and straight medially; lateral margins steeply oblique contracted from middle to apex; posterior margin foliiform enlarged afterward on middle, sides straight; border with whole edging except posterior margin; front angles obtusely triangular, posterior angles rectangular; disc convex, covered with fine, dense and even punctures, sides near base with oblique, longitudinal groove. Scutellum triangular, finely and evenly punctate. Elytra oblong-oval, strongly convex, about 2.8 times as long as broad, 4.5 times the length and 1.1 times the width of pronotum; shoulders caelate; sides subparallel, edging visible in dorsal view; punctato-striate deep, the punctures in striate distinct, intervals slightly convex,



Figs. 1-7. *Platydema brunnea* sp. nov. 1. Adult male. 2. Head. 3. Pronotum. 4. Right antenna. 5. Left antenna. 6. Aedeagus dorsal. 7. Aedeagus ventral.



Figs. 8-15. *Platydema* sp. 8. *P. alticornis* Gravely 9. *P. aurimaculatum* Gravely 10. *P. chalceum* Gebien 11. *P. coeruleum* Gebien 12. *P. detersum* Walker 13. *P. endoi* Masumoto (from Masumoto, 1984) 14. *P. flavopictum* Gebien (from Schwaller, 2004) 15. *P. fumosum* Lewis

finely and evenly punctured; epipleur whole. Prosternal process elliptical, anterior part with 1 longitudinal ridge. Anal segment transversely triangular, weakly convex, margins pubescent. Tibiae with finely round teeth in outer, keel-shape indistinct; tarsi inter with brush, ratios of the lengths of pro-, meso- and metatarsomeres 5.5:4.5:4.17; 14.6:5.5:21; 24.9:7:22. Aedeagus length 1.4mm, width 0.3 mm; parameres length 0.4 mm, spiky-form; basal plate length 1.0 mm, 2.5 times as long as parameres, sides subparallel.

Female. Clypeus front margin without angle-form prominent; frons with no horns, but with 2 symmetrical tubercles, deeply cupped in middle. Other characters as male.

Body length 7.3-7.5 mm, 7.4-7.6 mm, width 3.2-3.4 mm, 3.3-3.5 mm.

Holotype ♂, Mohan, Mengla County, Yunnan, 3 Aug. 2007, collected by REN Guo-Dong. Paratypes: 1 ♂, 5 ♀, Mohan, Mengla County, Yunnan, 3-4 Aug. 2007, collected by REN Guo-Dong, HOU Wen-Jun and LI Ya-Lin.

**Diagnosis.** The new species can be distinguished from *P. alticornis* Gravely, 1915 by the following characters: body narrower and longer; the left horn on frons tubercle-form, and the right one base wide, apex long and narrow, no hairs; legs black brown, tarsi reddish brown.

**Etymology.** Named after its reddish brown tarsi.

#### 4) *Platydema chalceum* Gebien, 1925 (Fig. 10)

*Platydema chalceum* Gebien, 1925. Philippine J. Sci., 27 (4): 572-573; Schawaller, 2004. Stuttgarter Beitr. Naturk., (A) Nr. 671: 7.

Material examined. 2 ♂, Zedong, Naidong County, Xizang, 25 Aug. 2002, collected by ZHU Ming-Sheng etc.

Distribution. China (Xizang, Taiwan), Indonesia, India, Java (type locality).

#### 5) *Platydema coeruleum* Gebien, 1928 (Fig. 11)

*Platydema coeruleum* Gebien, 1928. Stett. Ent. Ztg., 89: 570; Schawaller, 2004. Stuttgarter Beitr. Naturk., (A) Nr. 671: 7.

Material examined. 1 ♂, Huangqiong hollow, Yachang County, Guangxi, 23 July 2004, collected by YU Yang and GAO Chao.

Distribution. China (Guangxi, Taiwan (type locality)).

#### 6) *Platydema detersum* Walker, 1858 (Fig. 12)

*Platydema detersum* Walker, 1858. Ann. Mag. Nat. Hist., (3) 2: 284;

Schawaller, 2004. Stuttgarter Beitr. Naturk., (A) Nr. 671: 7-8.

*Platydema valgum* Pascoe, 1869. Ann. Mag. Nat. Hist., (4) 3: 281; Gebien, 1940. Mitt. M üchn. Ent. Ges., 410 (535).

*Platydema malaccum* Marseul, 1876. Ann. Soc. Ent. Fr., (5) 6: 108; Gebien, 1925. Philipp. Jour. Sci., 27 (4): 583.

*Platydema laticorne* Fairmaire, 1882. Notes Leyd. Mus., 4: 222; Gebien, 1925. Philipp. Jour. Sci., 27 (4): 583.

*Platydema annamitum* Fairmaire, 1893. Ann. Soc. Ent. Fr., 62: 24; Gebien, 1925. Philipp. Jour. Sci., 27 (4): 583.

*Platydema detersum rubripes* Gebien, 1925: Philipp. Jour. Sci., 27 (4): 539-

593; Gebien, 1940, Mitt. M üchn. Ent. Ges., 410 (535).

Material examined. 1 ♂, 3 ♀, Miao Village, Baisha County, Hainan, 4-5 June 2007, collected by BA Yi-Bin and LANG Jun-Tong; 1 ♂, 1 ♀, Kaishibo, Baisha County, Hainan, 1-2 June 2007, collected by BA Yi-Bin and LANG Jun-Tong; 18 ♂, 15 ♀, Nansan, Zhenkang County, Yunnan, 4700 m, 19-21 July 2008, collected by XU Ji-Shan and ZHOU Yong; 1 ♂, Banhong, Cangyuan County, Yunnan, 1130 m, 16-18 July 2008, collected by XU Ji-Shan and GAO Zhen-Hua.

Distribution. China (Yunnan, Hainan, Taiwan), Philippines, New Guinea, Australia, Sri Lanka (type locality), India, Thailand, Laos, Vietnam, Sunda Islands.

#### 7) *Platydema endoi* Masumoto, 1984 (Fig. 13)

*Platydema endoi* Masumoto, 1984. Elytra, 11: 22.

Material examined. None.

Distribution. China (Taiwan (type locality)).

#### 8) *Platydema flavopictum* Gebien, 1913 (Fig. 14)

*Platydema flavopictum* Gebien, 1913. Arch. Naturg., 79, A9: 17; Schawaller, 2004. Stuttgarter Beitr. Naturk., (A) Nr. 671: 8.

Material examined. None.

Distribution. China (Taiwan (type locality)), Burma, Thailand.

#### 9) *Platydema fumosum* Lewis, 1894 (Fig. 15)

*Platydema fumosum* Lewis, 1894. Ann. Mag. Nat. Hist., (6) 13: 395; Chujo and Lee, 1993. Esakia, 33: 109; Kwon et al., 1996. Knxn, 162; Schawaller, 2004. Stuttgarter Beitr. Naturk., (A) Nr. 671: 8. *Platydema fumosum formosanum* Gebien, 1925. Philipp. Jour. Sci., 27 (4): 589.

Material examined. 1 ♂, 1 ♀, Jigong Mountain, Xinyang County, Henan, 12 July 2005, collected by WANG Ji-Liang and GAO Chao.

Distribution. China (Henan, Fujian, Taiwan), Japan (type locality), Korea.

#### 10) *Platydema guangxicum* Schawaller, 2004 (Fig. 16)

*Platydema guangxicum* Schawaller, 2004. Stuttgarter Beitr. Naturk., (A) 671: 24, 38-39.

Material examined. 1 ♂, Baotian Mountain, Neixiang County, Henan, 22 Aug. 2008, collected by REN Guo-Dong etc.

Distribution. China (Henan, Guangxi (type locality)).

#### 11) *Platydema haemorrhoidale* Gebien, 1913 (Fig. 17)

*Platydema haemorrhoidale* Gebien, 1913. Arch. Naturg., 79, A9: 16; Schawaller, 2004. Stuttgarter Beitr. Naturk., (A) Nr. 671: 9.

Material examined. None.

Distribution. China (Fujian, Taiwan (type locality)), Nepal, Vietnam, India.

#### 12) *Platydema higonum* Lewis, 1894

*Platydema higonum* Lewis, 1894. Ann. Mag. Nat. Hist., (6) 13: 394; Schawaller, 2004. Stuttgarter Beitr. Naturk., (A) Nr. 671: 9.

Material examined. None.

Distribution. China (Fujian), Japan (type locality).

**13) *Platydema indicum* Gebien, 1940 (Fig. 18)**

Basides *ruficolle* Motschulsky, 1873. (homonym of *B. ruficolle* Laporte et Brullé, 1831).

*Platydema indicum* Gebien, 1940. Mitt. Münch. Ent. Ges., 30; Schawaller, 2004. Stuttgarter Beitr. Naturk., (A) Nr. 671: 9.

Material examined. , Bawang Mountain, Changjiang County, Hainan, 8 July 2006, collected by WANG Ji-Liang and GAO Chao; 2 , 1 , Wuzhi Mountain, Hainan, 24 July 2006, collected by WANG Ji-Liang and GAO Chao.

Distribution. China (Hainan), new record, India (type locality), Thailand, Malaysia, Vietnam.

**14) *Platydema marseuli* Lewis, 1894 (Fig. 19)**

*Platydema marseuli* Lewis, 1894. Ann. Mag. Nat. Hist., (6) 13: 394; Schawaller, 2004. Stuttgarter Beitr. Naturk., (A) Nr. 671: 12.

*Platydema nigroaeneum* Harold, 1878. Deutsche Ent. Zeitsch., 22: 78; Marseul, 1876. Ann. Soc. Ent. Fr., V6: 105; Fairmaire, 1888. Ann. Soc. Ent. Fr., VI8: 355.

*Platydema benakatense* Masumoto et Makinara, 1997. Bull. For. Pro. Res. Inst. Ibar. 374: 119; Schawaller, 2004. Stuttgarter Beitr. Naturk., (A) Nr. 671: 12.

Material examined. 3 , Arboretum, Xujiang County, Shanghai, 12-17 Mar. 2006, collected by BI Wen-Heng; 5 , Jiuxi, Hangzhou County, Zhejiang, 25 Mar. 2006, collected by BI Wen-Heng; 2 , Mohan, Mengla County, Yunnan, 3-4 Aug. 2007, collected by REN Guo-Dong, HOU Wen-Jun and LI Ya-Lin; , Yuanmen, Baisha County, Hainan, 28-29 May 2007, collected by BA Yi-Bin and LANG Jun-Tong.

Distribution. China (Shanghai, Zhejiang, Yunnan, Hainan, Taiwan), Japan (type locality), India, Philippines.

**15) *Platydema pallidicollis* Lewis, 1894 (Fig. 20)**

*Platydema pallidicollis* Lewis, 1894. Ann. Mag. Nat. Hist., 6 (13): 398; Schawaller, 2004. Stuttgarter Beitr. Naturk., (A) Nr. 671: 14.

*Platydema sodale* Waterhouse, 1894. Ann. Mag. Nat. Hist., 6 (14): 70; Gebien, 1925. Philippine J. Sci., 27 (4): 551-552.

Material examined. 1 , Mohan, Mengla County, Yunnan, 3-4 Aug. 2007, collected by REN Guo-Dong, HOU Wen-Jun and LI Ya-Lin.

Distribution. China (Yunnan, Taiwan), Philippines, Japan (type locality).

**16) *Platydema parachalceum* Masumoto, 1982**

*Platydema parachalceum* Masumoto, 1982. Ent. Rev. Japan, 36 (2): 147-148; Schawaller, 2004. Stuttgarter Beitr. Naturk., (A) Nr. 671: 14-15.

*Platydema zoltani* Masumoto, 1985. Ent. Rev. Japan, 40 (2): 121-124; Schawaller, 2004. Stuttgarter Beitr. Naturk., (A) Nr. 671: 14-15.

Material examined. None.

Distribution. China (Fujian, Yunnan, Shaanxi,

Hubei, Guizhou, Taiwan (type locality)), Philippines, New Guinea, Australia.

**17) *Platydema sakishimense* Nakane, 1973**

*Platydema sakishimense* Nakane, 1973. Mem. Nat. Sci. Mus. Tokyo, (6): 104, 108.

Material examined. None.

Distribution. China (Taiwan), Japan (type locality).

**18) *Platydema sauteri* Gebien, 1913 (Fig. 21)**

*Platydema sauteri* Gebien, 1913. Arch. Naturg., 79, A9: 15; Schawaller, 2004. Stuttgarter Beitr. Naturk., (A) Nr. 671: 17.

Material examined. 9 , 13 , Huaguo Mountain, Yiyang County, Henan, 3 Aug. 2006, collected by WANG Feng-Yan and HUANG Wen-Jing; 1 , Yuexi County, Anhui, 17-21 July 2007, collected by BA Yi-Bin, LANG Jun-Tong and WANG Feng-Yan.

Distribution. China (Henan, Anhui, Taiwan (type locality)), Japan.

**19) *Platydema semimetallicum* Blair, 1930 (Fig. 22)**

*Platydema semimetallicum* Blair, 1930. Ent. Mon. Mag., 66: 177; Schawaller, 2003. Biodiversität und Naturausstattung im Himalaya, S. 260, Taf. - .

*Platydema martensi* Schawaller, 1994. Entomfauna. 15: 262; Schawaller, 2003. Biodiversität und Naturausstattung im Himalaya, S. 260, Taf. - .

Material examined. None.

Distribution. China (Xizang), India (type locality), Nepal.

**20) *Platydema subfuscum* Walker, 1858 (Fig. 23)**

*Platydema subfuscum* Walker, 1858. Ann. Mag. Nat. Hist., 2 (3): 284; Gebien, 1925. Philippine J. Sci., 27 (4): 558; Schawaller, 2004. Stuttgarter Beitr. Naturk., (A) Nr. 671: 19.

*Hoplóphala cedebum* Chevrolat, 1877. Pet. Nouv. Ent., 2 (182): 178; Gebien, 1940. Mitt. Münch. Ent. Ges., 409 (534).

*Hoplóphala diversidens* Fairmaire, 1883. Ann. Fr., 62: 24; Gebien, 1940. Mitt. Münch. Ent. Ges., 409 (534).

*Platydema* var. *hoanum* Pic, 1929. Mel. Ent., 54: 33; Gebien, 1940. Mitt. Münch. Ent. Ges., 409 (534).

*Alphitophagus japonum* Marseul, 1876. Ann. Fr., (5) 6: 109; Lewis, 1894. Ann. Mag., (6) 13: 397; Gebien, 1940. Mitt. Münch. Ent. Ges., 409 (534).

*Basidys picicollis* Motschulsky, 1873. Bull. Mosc., 46: 474; Gebien, 1940. Mitt. Münch. Ent. Ges., 409 (534).

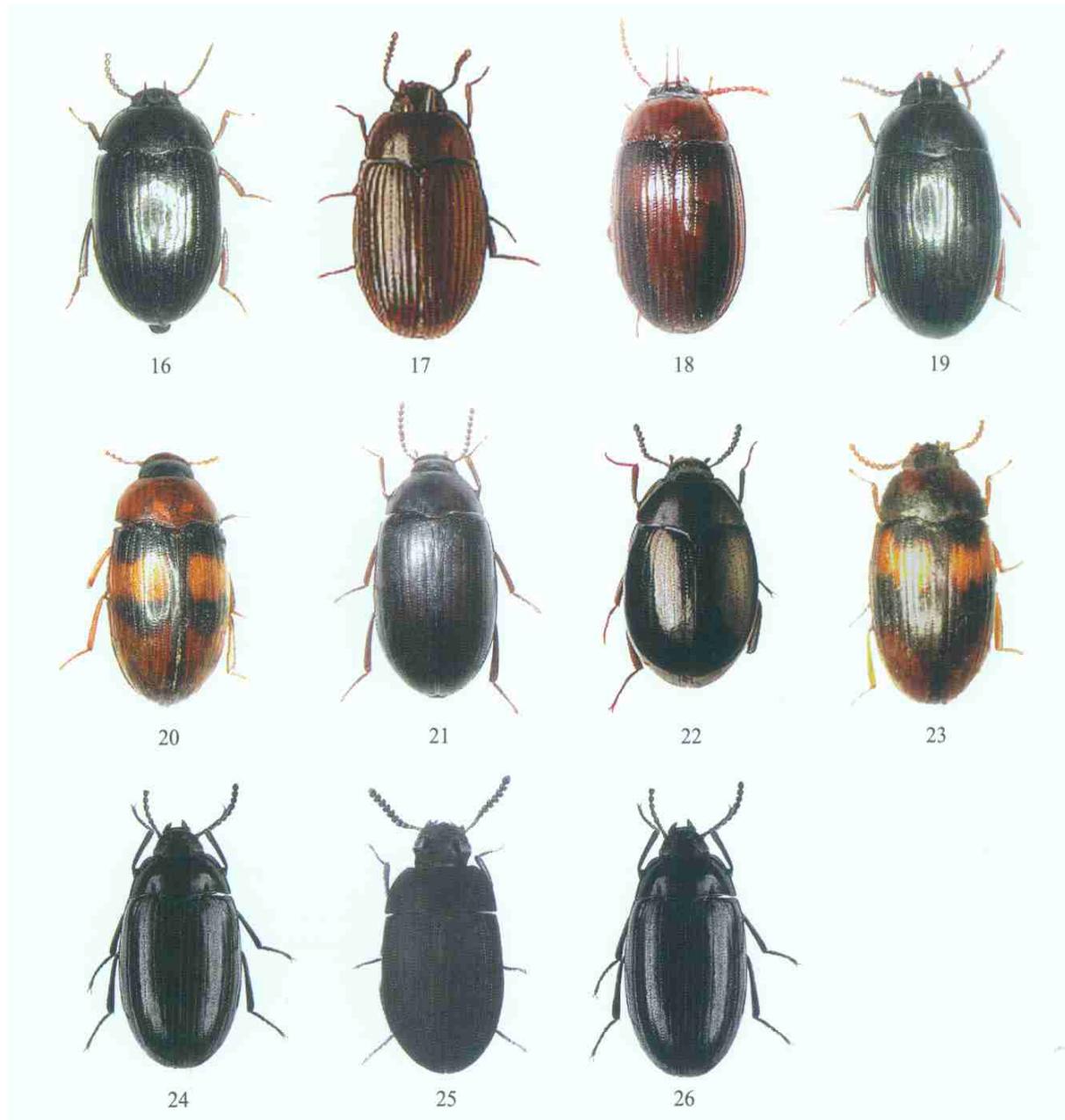
Material examined. 23 , 30 , Yuanmen, Baisha County, Hainan, 28-29 May 2007, collected by BA Yi-Bin and LANG Jun-Tong; 5 , 1 , Xinwei Farm, Qiongzhou County, Hainan, 4700 m, 17-18 May 2008, collected by BA Yi-Bin and LANG Jun-Tong.

Distribution. China (Fujian, Hainan, Taiwan), Japan, Burma, Malaysia, India, Indonesia, Madagascar, Sri Lanka (type locality).

**21) *Platydema terusane* Masumoto, 1984 (Fig. 24)**

*Platydema terusane* Masumoto, 1984. Elytra, 11: 21.

Material examined. None.



Figs. 16-26. *Platydema* sp. 16. *P. guangxicum* Schwaller 17. *P. haemorrhoidale* Gebien (from Schwaller, 2003) 18. *P. indicum* Gebien 19. *P. marseuli* Lewis 20. *P. pallidicollis* Lewis 21. *P. sauteri* Gebien 22. *P. semimetallicum* Blair (from Schwaller, 2003) 23. *P. subfascium* Walker 24. *P. terusane* Masumoto (from Masumoto, 1984) 25. *P. tricuspis* Motschulsky (from Schwaller, 2004) 26. *P. yunnanicum* Schwaller (from Schwaller, 2004)

Distribution. China (Taiwan (type locality)).

**22) *Platydema tricuspis* Motschulsky, 1873 (Fig. 25)**

*Platydema tricuspis* Motschulsky, 1873. Bull. Imp. Nat. Mus., 42: 479; Schwaller, 2004. Stuttgarter Beitr. Naturk. (A) Nr. 671: 20.  
*Platydema timorensis* Marseul, 1876. Ann. Soc. Ent. Fr., V6: 108; Gebien, 1925. Philippine J. Sci., 27 (4): 578.  
*Platydema reflexum* Chevrolat, 1878. Pet. Nouv. Ent., 2: 222; Gebien, 1925. Philippine J. Sci., 27 (4): 578.

Material examined. None.

Distribution. China (Taiwan), India (type locality), Philippines, New Guinea, Australia.

**23) *Platydema tuchinlongi* Masumoto, 1982**

*Platydema tuchinlongi* Masumoto, 1982. Ent. Rev. Japan, 36 (2): 149-150.

Material examined. None.

Distribution. China (Taiwan (type locality)).

**24) *Platydema yangmingense* Masumoto, 1982**

*Platydema yangmingense* Masumoto, 1982. Ent. Rev. Japan, 36 (2): 148-149.

Material examined. None.

Distribution. China (Taiwan (type locality)).

**25) *Platydema yunnanicum* Schwaller, 2004 (Fig. 26)**

*Platydema yunnanicum* Schwaller, 2004. Stuttgarter Beitr. Naturk. (A) Nr. 671: 46.

Material examined. None.

Distribution. China (Yunnan (type locality)).

Acknowledgements We express our cordial thanks to Dr. Kiyoshi Ando, the Private Laboratory: Kofu-dai 5-3-5, Toyono-cho, Toyono-Gun, Osaka, 563-0104, Japan, and Dr. Wolfgang Schawaller, Stuttgart Museum in Germany, for helpful assistance, and to HOU Wen-Jun and LI Ya-Lin for providing the specimens collected in Mohan Town.

## REFERENCES

Blair, K. G. 1930. Some new species of Indian Heteromera. *Entomologist's Monthly Magazine*, 66: 177-181.

Chevrolat, A. 1878. Diagnoses de Diapides (suite). *Petites Nouvelles Entomologiques*, 2: 221-222, 242-243.

Gebien, H. 1913. H. Sauter's Formosa = Ausbeute, Tenebrionidae (Coleopt.). *Archiv für Naturgeschichte*, 79 (A9) : 1-58.

Gebien, H. 1925. Die Tenebrioniden (Coleoptera) des Indomalayischen Gebietes, unter Berücksichtigung der benachbarten Faunen. . Die Gattungen Platydema Castelnau und Brullé. *The Philippine Journal of Science*, 27 (4) : 539-595.

Gebien, H. 1925. Die Tenebrioniden (Coleoptera) des Indomalayischen Gebietes, unter Berücksichtigung der benachbarten Faunen. . Die Gattungen Arsocara, Spilosapha, Menimus, Lbidoera, und Pentaphyllus. *The Philippine Journal of Science*, 28: 101-128.

Gebien, H. 1928. Über einige Gruppen amerikanischer Tenebrioniden (Col. Heter.). *Stettiner Entomologische Zeitung*, 89: 97-164, 167-234.

Gebien, H. (1940) Die von Dr. Trinkler in Tibet gesammelten Tenebrioniden (Col. Tenebr.). Mitteilungen der Münchner Entomologischen Gesellschaft, 30: 1-3.

Gebien, H. 1940. Katalog der Tenebrioniden, Teil . Mitteilungen der Münchner Entomologischen Gesellschaft, 30, 755-786.

Gravely, F. H. 1915. XLII. Coleoptera, IX: Tenebrionidae. In: *Zoological results of the Abor Expedition, 1911-12. XLII. Coleoptera IX: Tenebrionidae. Records of the Indian Museum*, 8: 519-536.

Kaszab, Z. 1980. Neue Tenebrioniden (Coleoptera) aus Sri Lanka. *Acta Zoologica Academiae Scientiarum Hungaricae*, 26 (1-3) : 123-196.

Laporte de F., Castelnau, L. N. and Brullé, G. A. 1831. Monographie du genre Diaperis. *Annales des Sciences Naturelles*, Paris, 23 : 332.

Lewis, G. 1894. On the Tenebrionidae of Japan. *Annals and Magazine of Natural History* (Ser. 6), 13 : 377-400, 465-485.

Masumoto, K. 1982. New or little known Tenebrionidae from Formosa ( ). *Entomological Review of Japan*, 36: 143-152.

Masumoto, K. 1984. Tenebrionidae of Formosa (6). *Elytra*, 11: 16-24.

Masumoto, K. and Makihara, H. 1997. Study on the Tenebrionid Beetles in South Sumatra. *Bulletin of the Forest Products Research Institute Ibaraki*, 374: 115-153.

Masumoto, K. 1985. Notes and descriptions of Japanese Tenebrionidae ( ). *Entomological Review of Japan*, 40: 21-27.

Motschulsky, V. 1873. Énumération des nouvelles espèces de Coléoptères rapportées de ses voyages. *Bulletin de la Société Impériale des Naturalistes de Moscou*, 46 (1) : 466-482.

Nakane, T. 1973. Notes on some species of Tenebrionidae from the Yaeyama Islands. *Memoirs of the National Science Museum*, Tokyo, 6: 103-108.

Ren, G-D and Gao, C 2007. A taxonomic study on the genus Ceropria from China (Coleoptera, Tenebrionidae). *Acta Zootaxonomica Sinica*, 32 (1) : 200-207. [动物分类学报]

Ren, G-D and Huang, W-J 2008. Taxonomic study of the genus Ischnodatylus Chevrolat (Coleoptera, Tenebrionidae) with description of a new species from China. *Acta Zootaxonomica Sinica*, 33 (3) : 495-497. [动物分类学报]

Schawaller, W. 1994. New Oriental Tenebrionidae (Coleoptera). *Entomofauna*, 15 : 261-280.

Schawaller, W. 2003. The genus Platydema Laporte et Brullé in the Himalaya and adjacent regions, with descriptions of five new species (Insecta: Coleoptera: Tenebrionidae). In: Hartmann, M. et Baumbach, H. (Hrsg.): *Biodiversität und Naturausstattung im Himalaya*, S. 269-277, Taf. - ; Erfurt (Verein der Freunde und Förderer des Naturkundemuseums).

Schawaller, W. 2004. The Oriental species of Platydema Laporte et Brullé, with descriptions of 16 new species (Coleoptera: Tenebrionidae). *Stuttgarter Beiträge zur Naturkunde*, (A) 671 : 1-49.

Walker, F. 1858. Characters of some apparently undescribed Ceylon Insects. *Annals and Magazine of Natural History*, 2 (3<sup>rd</sup> Series), 280-286.

## 中国宽菌甲属昆虫研究及一新种记述（鞘翅目，拟步甲科）

黄文静 任国栋

河北大学生命科学学院 保定 071002

**摘要** 对中国宽菌甲属 *Platydema* Laporte et Brullé, 1831 已知种类进行了分类整理, 给出已知 25 种的识别检索表和成虫形态图, 并描述了 1 新种, 棕跗宽菌甲 *Platydema brunnea* sp. nov.。模式标本保存于河北大学博物馆。

**棕跗宽菌甲, 新种** *Platydema brunnea* sp. nov. (图 1~7)

正模 , 云南勐腊磨憨, 2007-08-03, 任国栋采。副模: 1, 5 , 云南勐腊磨憨, 2007-08-03, 任国栋、侯文君、李亚林采。

**关键词** 鞘翅目, 拟步甲科, 宽菌甲属, 新种, 中国。

**中图分类号** Q969.498.2

新种在外形上与高角宽菌甲 *P. alticornis* Gravely, 1915 近似, 两者的主要区别为: 1) 前者身体狭长, 而后者较短; 2) 前者左额角瘤突状, 右额角基部宽阔, 端部狭长, 顶端无毛; 而后者的左角长于右角, 左角片状, 两侧平行, 端部具毛簇, 右角短三角形, 端部尖, 无毛; 3) 前者足黑褐色, 跗节棕色; 而后者的胫、跗节浅褐色。

**词源:** 种名根据附节棕色得名。